

FYB.Com.

Subject: Business Mathematics and Statistics AC 22001

Semester: II

Year: 2020-21

Unit 2: Correlation and Regression\_Skill development

(Aptitude and problem solving)

## MATHS PROJECT.

NAME - HRUTUJA KALE.

ROLLNO - 3065

TITLE - KARL PEARSONS  
&  
SPEARMAN'S.

YEAR - 2020-2021

SEM - II

DIV - FYBCOM (A).

### Karl Pearson Correlation Coefficient -

#### \* DEFINITION & FORMULA -

Karl Pearson's Coefficient of Correlation is an extensively used mathematical method in which the numerical representation is applied to measure the level of relation between linear related variables.

• Formula  $r = \frac{N \sum(xy) - \sum x \sum y}{\sqrt{[N \sum x^2 - (\sum x)^2][N \sum y^2 - (\sum y)^2]}}$

\* Notation - Karl Pearson's Coefficient of Correlation is denoted by (r)

$$-1 \leq r \leq +1$$

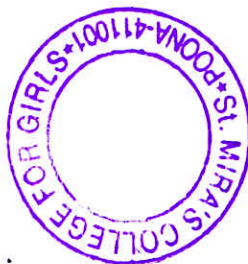
• Direction of change is indicated by sign (-ve) or (+ve).

• If  $r > 0$  it is positive correlation

• If  $r < 0$  it is negative correlation

• If  $r = 0$  there is no correlation

Subject Teacher  
MS. Deepa. Krishnamurthi  
*Deepa*



*JK*  
Principal Incharge  
St. Mira's College for Girls